

Symphyodon complanatus Dixon (Symphyodontaceae: Moss) a new record for Kerala (India)

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Introduction

The genus *Symphyodon* was established by Montagne (1841) for a single species. The generic name refers to the fact that the endostome segments are partially adnate to the exostome teeth. *Symphyodon* Mont. is a Pleurocarpic moss genus mostly epiphytic, primarily distributed in the tropical and the subtropical areas of the world. There are 15 valid species nearly restricted in southern and southeastern Asia (He and Snider, 2000). The genus is characterized by having echinate capsules, distally roughened or papillose setae, and prorate leaf cells. The sterile plants of *Symphyodon* are, usually confused with members of distant genera such as *Glossadelphus* Fleisch. (Sematophyllaceae) and *Taxiphyllum* Fleisch. (Hypnaceae). However, it is easy to distinguish when it produces the sporophyte.

When the genus was established, Montagne (1841) did not assign it to a family. It was Mueller (1851) who transferred *Symphyodon perrottetii* Mont., the type species of the genus, to *Neckera* Hedw. of Hypnoideae (Hypnaceae), allying it with *Neckera angusta* C. Mu?ll. under the section *Entodon* (C. Mu?ll.) C. Mu?ll. Later Mitten (1859), however, recognized *Symphyodon* as a section under the genus *Stereodon* Mitt. of Hypnaceae. Jaeger (1878) placed *Symphyodon* in the family Cylandrotheciaceae (= Entodontaceae). Brotherus (1907) initially placed *Symphyodon* in the family Entodontaceae, but later (1925) followed Fleischer (1923), in placing in its own family, the Symphyodontaceae. Brotherus' (1925) treatment of *Symphyodon* was the first detailed assessment of the genus on a world wide basis. He recognized 14 out of the 17 species published up to 1925. Since then, some of the *Symphyodon* taxa have occasionally been treated in regional floras (such as Bartram, 1939; Gangulee, 1976; Horikawa and Ando, 1964).

Gangulee (1976) reported nine species and one variety from India, which is evidently a centre of

distribution. *Symphyodon perrottetii* Mont. is the most widely distributed species of the genus, which was recorded from Kerala also (Manju et al., 2008). During our recent explorations in the lowlands and midlands of Kozhikode district, we could collect one interesting rare species of the genus, viz., *S. complanatus* Dix. In Southern India, it was collected by Foreau from Palni hills of Tamil Nadu (He and Snider, 1992). It was not recorded earlier from Kerala, and hence is reported here.

***Symphyodon complanatus* Dixon**, Rec. Bot. Surv. India. 6: 65. 2f. 1914. TYPE: INDIA, Arunachal Pradesh, Abor District., Burkill 36208 (BM, holotype). *Homalia pygmaea* var. *elongata* Dix. & P. de la Varde, Arch. Bot. 1 (8-9): 182. 1927. TYPE: INDIA, Tamil Nadu, Palni Hills, Foreau 752 (BM, holotype; CAM, isotype).

Plants yellowish-green, semi robust, creeping, up to 10 cm, branching bi or tri pinnately erect or suberect, shoots complanate. Leaves dimorphic, stem leaves larger than branch leaves, complanate, spreading, oblong-ovate to oblong-lingulate, up to 2 mm long and 0.7 mm wide, apices obtuse to rounded; branch leaves small, complanate, elongate-ovate to lingulate, $\pm 1.28 \times 0.45$ mm, apices rounded; all leaves with margins coarsely serrate in upper half, serration formed by row of enlarged cells, sometimes incurved on one side at base; costae unequal, Leaf cells narrow elongate with papillae on upper angles, apical leaf cells shorter than adjacent cells; median cells linear, $55-70 \times 3.5-4.5$ mm; alar cells differentiated, irregularly rectangular to quadrate, of 2-4 rows extending 3-5 cells up margins. Perichaetial leaves sheathing at base, gradually narrowed to long acumen, cells porose, thick walled. Seta long, upto 3 cm long, capsules erect, cylindric, asymmetric, ca 3.1×1.2 mm, spores ca 17 mm in diameter, finely papillose. (Fig. A-I).

Microhabitat: On small rocks near stream in forests.

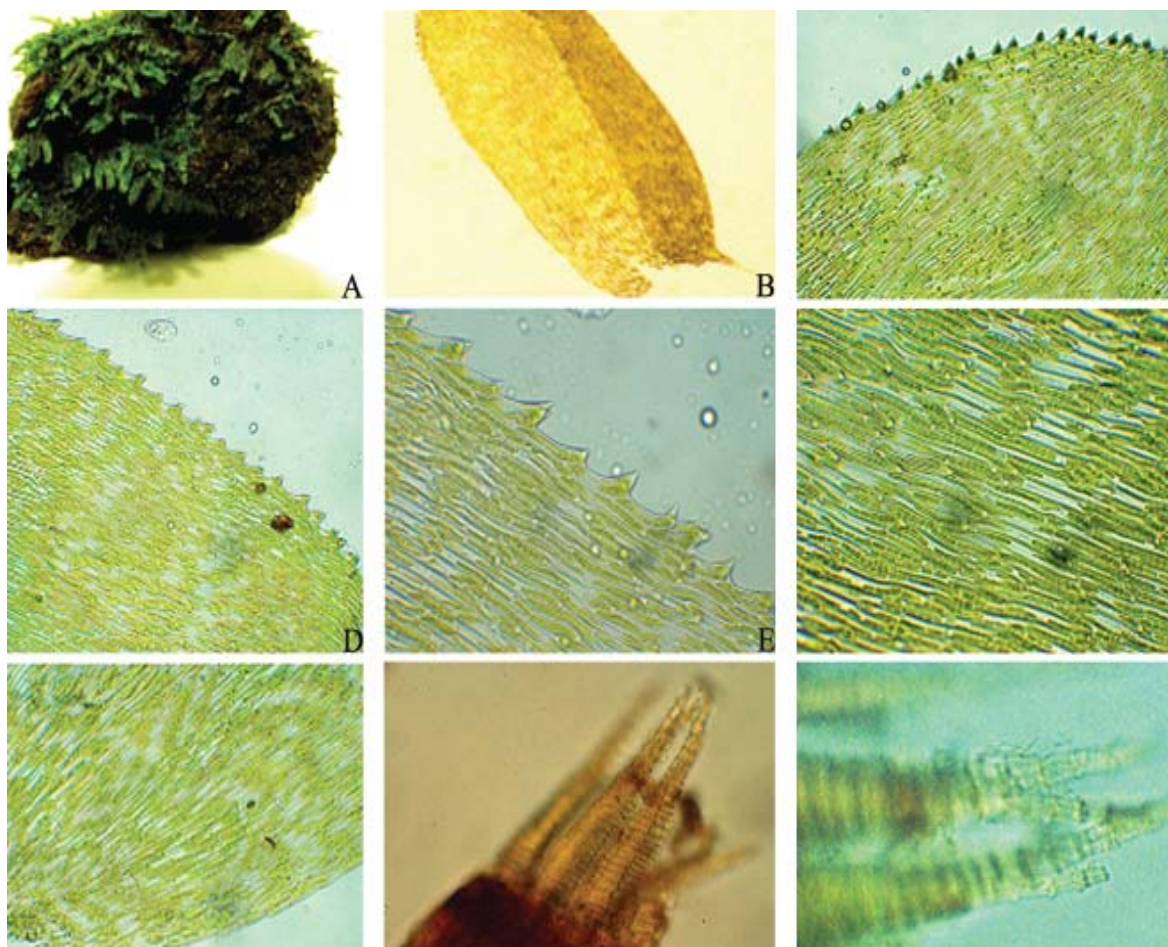


Fig. 1. *Symphyodon complanatus* A. Habit, B. Leaf, C. Leaf apex, D. Leaf margin, E. Marginal cells enlarged, F. Leaf cells, G. Leaf base, H & I. Peristome teeth

Specimens examined: Kerala, Kozhikode district, Anakkampoyil, *KP Rajesh 1302, 1306* (ZGC); Thusharagiri hills (400 m), *Mufeed 312* (ZGC).

Distribution: It is distributed in India (Eastern Himalaya, Arunachal Pradesh, Darjeeling and Tamil Nadu). The present collection is a new record of occurrence for Kerala State. Endemic to India.

Note: *S. complanatus* is similar to *S. scabrisetus* in several features, but the former is characterized by marginal cells being large and forming serrations compared to the dentate margins of the latter.

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